TEXAS DEPARTMENT OF INSURANCE

Engineering Services Program / MC 103-3A 333 Guadalupe Street P.O. Box 149104 Austin, Texas 78714-9104 Phone No. (512) 322-2212 Fax No. (512) 463-6693

PRODUCT EVALUATION

WIN-1687 Reevaluation Date: **June 2013**

Effective Date: December 1, 2012

The following product has been evaluated for compliance with the wind loads specified in the **International Residential Code** (IRC) and the **International Building Code** (IBC).

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

FeelSafe Monument Kingsview Clad Wood Double Hung Windows, Individual and Mulled, Impact Resistant, manufactured by

Hurd Windows and Doors 575 South Whelen Avenue Medford, Wisconsin 54451 Telephone: (715) 748-2011

General Description:

System	Description	Label Rating	Design Pressure Rating (psf)	
1	FeelSafe Kingsview Clad Wood Double Hung Window; X/X	H-R65 41 x 77 Missile Level D	+65/-70	
2	FeelSafe Kingsview Clad Wood Double Hung Window; X/X.X/X	H-R65 83 x 77 Missile Level D	+65/-70	

Product Dimensions:

System	Overall Size	Top Sash Size	Bottom Sash Size
1	41 $\frac{5}{16}$ " x 76 $\frac{5}{8}$ "	39" x 37 ½"	39" x 37 ½ "
2	82 ⁵ / ₁₈ " x 76 ⁵ / ₈ "	Two: 39" x 37 ½"	Two: 39" x 37 ½"

Product Identification (Certification Label on Window):

System		
	Certification Agency	WDMA
	Manufacturer's Name or Code Name	Hurd Windows and Doors
1-2	Product Name	FeelSafe Impact Monument KV Double-Hung
1-2	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-05:
		ASTM E 1886-02/ASTM E 1996-02;
		Missile Level D

Impact Resistance:

Impact Resistant	Requirement
Yes	These products satisfy the Texas Department of Insurance's criteria for
	protection from windborne debris in the Inland I and Seaward zone . The
	assemblies may be installed at any height on the structure as long as the design
	pressure rating for the assemblies is not exceeded.

Installation:

System 1

Option 1 (Nail Flange Installation): The wood wall framing members shall be minimum Southern Pine dimension lumber. The window shall be secured to the wood wall framing using the applied extruded aluminum nail flange (fin) of the window. Along the head, sill, and side jambs, the fasteners shall be minimum No. 8 screws. The fasteners shall be spaced approximately 2 inches from each corner and approximately 8 inches on center. The fasteners shall be long enough to penetrate a minimum of $1\frac{1}{2}$ inches into the wall framing.

Option 2 (Frame Installation): The wood wall framing members shall be minimum Southern Pine dimension lumber. The window shall be secured to the wood wall framing using the frame of the window. Along the head and side jambs, the fasteners shall be minimum No. 10 x 3" screws. The fasteners shall be spaced approximately 6 inches from each corner and approximately 16 inches on center. Along the sill, masonry clips (20 gauge x $1\frac{1}{2}$ " x $7\frac{5}{16}$ " steel) are located approximately 6 inches from each corner and one (1) at the mid span. The clips are secured to the window frame with two (2) No. 6 x $\frac{1}{2}$ " screws and to the wall framing with two (2) No. 8 screws. The fasteners shall be long enough to penetrate a minimum of $1\frac{1}{2}$ inches into the wall framing.

System 2:

Option 1 (Nail Flange Installation): The wood wall framing members shall be minimum Southern Pine dimension lumber. The window shall be secured to the wood wall framing using the applied extruded aluminum nail flange (fin) of the window. Along the head, sill, and side jambs, the fasteners shall be minimum No. 8 screws. The fasteners shall be spaced approximately 2 inches from each corner and approximately 8 inches on center. Along the head, a No. 10 x 2 $\frac{1}{2}$ " screw shall be located 3 inches and 6 inches on either side of the vertical mullion. Along the sill, L-brackets (20 gauge x 1 $\frac{1}{2}$ " x 2 $\frac{1}{2}$ " steel) are located 3 inches on either side of the vertical mullion. The brackets are secured to the window frame with one (1) No. 10 x 3" screw and to the wall framing with two (2) No. 8 screws. The fasteners shall be long enough to penetrate a minimum of 1 $\frac{1}{2}$ inches into the wall framing.

Option 2 (Frame Installation): The wood wall framing members shall be minimum Southern Pine dimension lumber. The window shall be secured to the wood wall framing using the frame of the window. Along the head and side jambs, the fasteners shall be minimum No. 10 x 3" screws. The fasteners shall be spaced approximately 6 inches from each corner and approximately 16 inches on center. Along the sill, masonry clips (20 gauge x 1 $\frac{1}{2}$ " x 7 $\frac{5}{16}$ " steel) are located approximately 6 inches from each corner and one (1) at the mid span of each window. The clips are secured to the window frame with two (2) No. 6 x 2 $\frac{1}{2}$ " screws and to the wall framing with two (2) No. 8 screws. Along the head, a No. 10 x 2 $\frac{1}{2}$ " screw shall be located 3 inches and 6 inches on either side of the vertical mullion. The clips are secured to the window frame with two (2) No. 6 x 2 $\frac{1}{2}$ " screw and to the wall framing with two (2) No. 8

screws. The fasteners shall be long enough to penetrate a minimum of 1 $\frac{1}{2}$ inches into the wall framing.

Note: The manufacturer's installation instructions shall be available on the job site during installation. All fasteners shall be corrosion resistant as specified in the International Residential Code (IRC), the International Building Code (IBC), and the Texas Revisions.